19th ANNUAL

honor AWARDS PROGRAM

COMMERCE DEPARTMENT

19th ANNUAL honor AWARDS PROGRAM

February 14, 1967 / 3:00 P.M.

Departmental Auditorium

CONSTITUTION AVENUE BETWEEN 12th AND 14th STREETS, N.W./WASHINGTON, D.C.

Program

INTRODUCTION	John Will *Director of Personnel*
ADDRESS	Alexander B. Trowbridge *Acting Secretary of Commerce*
PROGRAM ANNOUNCEMENTS	David R. Baldwin *Assistant Secretary for Administration*

Silver and Gold Medal Awards

Music by
U.S. Merchant Marine Academy Regimental Band

Gold Medal Award Winners

FORREST D. HOCKERSMITH

Deputy Administrator
Business and Defense Services
Administration

Mr. Hockersmith provided outstanding leadership in creating and directing the programs of the Business and Defense Services Administration. He is recognized for his unique and valuable contributions to the Department of Commerce's objectives in promoting the development of industry and commerce of the United States. He performed in a consistent and outstanding manner as Acting Administrator and Deputy Administrator of the Business and Defense Services Administration in an economic situation of increased military procurement and high civilian production characterized by high consumer consumption with unusual military procurement, labor/management disputes in important industries, near capacity production and full employment, and increased inflationary pressures. Mr. Hockersmith was able to blend limited existing manpower resources to pursue the successful attainment of national economic civilian and military goals and more effectively promote the Department's position in the decisions of key economic bodies throughout the Government.

ROBERT E. GRAHAM, JR.

Chief, Regional Economics Division
Office of Business Economics

Dr. Graham has been a member of the professional staff of the Office of Business Economics for twenty years, for most of that period in increasingly responsible positions in its National Income Division. In 1957 he shared in a Silver Medal award for the massive research effort underlying the publication *Personal Income by States since 1929*. When in 1964 the Department consolidated in the Office of Business Economics the regional research work of several of its agencies, creating in OBE a new Regional Economics Division, Dr. Graham was put in charge of that unit. Under his direction the output of regional statistics has been vastly expanded through use of automatic data processing, and special services provided with respect to water resources planning, Appalachia, and regional economic development. As a result of his work for the Federal Government Dr. Graham is regarded in professional, business, and academic circles as one of the country's outstanding authorities in regional economic analysis.

CALVERT L. DEDRICK

Supervisory Statistician
International Statistical Programs Office
Bureau of the Census

Dr. Dedrick with 20 years of experience in international statistical fields has probably had a greater impact on the quantity and quality of statistics in more countries of the world than any other person. He pioneered in the recruitment and training of statistical advisers who were assigned to many foreign countries, he organized a facility for training representatives of other countries in statistical fields, and through his exceptional ability as a leader and participant in international meetings he has promoted a better understanding of the need for reliable statistics and has greatly widened the acceptance of high standards for statistical work. Some of the more than 1,000 representatives of foreign countries who have been trained through the facilities established by Dr. Dedrick have progressed in statistical work to become heads of the statistical agencies of their own countries. In this way his contributions to improved international statistics and to improved international understanding as well, will continue to be felt for many years.

WALTER L. KEHRES

Assistant Director for Administration
Bureau of the Census

Mr. Kehres, as Assistant Director for Administration for 14 years, has demonstrated his ability to meet unusual and particularly difficult administrative problems. His willingness to utilize recent technological advances for the improvement of management have led to undertaking such efforts as SPARTAN (*S*ystem for *P*ersonnel: *A*utomatic *R*ecords, *T*ransactions and *N*otices) and PROP (*P*erformance *R*eview for *O*perating *P*rograms). SPARTAN, now used in the Bureau, is more economical, faster, more accurate and requires a smaller staff than the old manual system for maintaining personnel records, and preparing written personnel actions and notifications. PROP, now in the process of being developed, is already being financed by savings from the slower and piecemeal systems it has replaced. It is used to record, compile and summarize management information using electronic data processing equipment. Mr. Kehres' leadership and managerial skill have been demonstrated many times in making the necessary decisions to meet such problems as: recruiting 180,000 additional field employees required for the 1960 Census and meeting the more than 500% increase in workload placed on the age verification unit following the enactment of Medicare.

WILLIAM I. MERKIN

Director of Administration
Domestic and International Business Area
Washington, D. C.

A practitioner of the art of fusing efficient administration with operating needs and the requirements of Department policy, William I. Merkin has repeatedly demonstrated that affirmative administration is a most effective partner in the discharge of the Department's responsibilities.

He first distinguished himself in the Census Bureau, where his performance won him the Meritorious Service Award of the Department in 1952.

Three successive BDSA Administrators had the highest praise for his work as Director of Administration of that Agency.

As Director of Administration of the Domestic and International Business area of the Department, he has accepted additional responsibility for supervising United States participation in expositions and similar celebrations held in the United States.

His ability to become quickly familiar with the realities of operating programs and to reshape administrative services, when combined with his unusual knowledge of the Department, have resulted in an unusually responsive and responsible administrative operation.

CHARLES L. BRISTOR

Chief, Data Processing and
Analysis Division
National Environmental Satellite Center
Environmental Science Services
Administration

Mr. Bristor is being recognized for original and unique scientific contributions in developing an automated data processing system for weather satellite observations. This system, the result of his conceptual thinking and detailed hardware, programming, and staffing implementation, makes possible the processing of nearly one billion bits of weather satellite data daily. It has enabled the meteorological community to receive processed satellite data faster and in more useful form than ever before. Development of this system is an unprecedented contribution to data processing technology and art. It reflects his outstanding international stature in this important field.

DONALD T. FARLEY

Supervisory Physicist
Lima, Peru
Environment Science Services
Administration

Dr. Donald T. Farley, scientist and Director of the Jicamarca Radar Observatory near Lima, Peru, has distinguished himself through the authorship of scientific publications of extraordinary importance to the field of upper atmosphere physics. His productivity of eighteen open-literature papers plus several major reports in a period of six years is totally exceptional.

In addition to his remarkable achievements as a scientist, Dr. Farley has directed the complex radar facility near Lima, Peru with outstanding skill and ingenuity. His leadership has made possible state-of-the-art research using this unique facility. His skill as a manager has promoted the continued friendly and effective relationships between the U.S. and Peruvian scientists and engineers involved in this cooperative venture in basic research.

FREDERICK G. SHUMAN

Director, National Meteorological Center
Environmental Science Services Administration

Dr. Shuman has successfully developed, tested, and put into operation a numerical prediction model which marks a major step forward in the weather services of the nation. He has been able to identify, isolate, and successfully attack those particular scientific problems which had to be solved before the application of primitive equation forecast models to operational daily use was possible.

Dr. Shuman has demonstrated highly distinguished authorship in a series of fundamental contributions to numerical prediction over a period of 12 years and has been in wide demand nationally and internationally as a lecturer. At the same time, he has fulfilled the new duties of Director of the National Meteorological Center in an outstanding manner, while at the same time maintaining his scientific leadership in the field of numerical weather prediction.

LAWRENCE A. FOX

Director
Bureau of International Commerce

Largely through Mr. Fox's extraordinary ability as an analyst, his persuasive facility for negotiation, and consummate skill at administration, the Department now enjoys a very considerable role and reputation in the councils of Government for formulating sound international commercial and financial policies. His contributions to clarifying and strengthening the business voice in the foreign economic policy process have been twofold. First, as a widely respected authority on U.S. trade policy and through superior tact, judgment and skill in working with senior policy officials of other agencies and foreign governments, he has greatly advanced Commerce positions on a number of issues of fundamental importance to the United States economy—notably in the field of trade negotiations. Secondly, as an inspired leader and administrator, he has attracted to the Department and developed an outstanding group of experts. Individually and collectively, they have added depth and strength to the Department's policy capability and earned the highest professional respect and admiration from both the public and private sectors. Mr. Fox's superior accomplishments range over 17 years of service with the Department—all of them with great distinction in the international field.

REX M. WHITTON*

Federal Highway Administrator
Bureau of Public Roads

For outstanding leadership in administering the major highway activities of the Federal Government, the principal among which are the programs of Federal highway aid to the States which provide for the construction of the 41,000-mile National System of Interstate and Defense Highways, and for the continuing improvement of the 851,000 miles of main highways, secondary roads, and urban arterials included in the Federal-aid road systems. In addition to distinguished service in highway transportation development in the United States, he is also noted for his achievements as a leader in highways and highway transportation developments worldwide. His early recognition of the place of highway transportation in urban areas, and of the interrelation between transportation and urban growth and community values, has been of great significance. His continuing and intensifying concern in urban problems and the concept of highway right-of-way being limited vertically as well as horizontally is a significant breakthrough in rational urban development and makes the highway truly an integral feature of urban design, as well as opening untold opportunity for imaginative urban development on an economically sound basis.

* *Presented while in office.*

HORACE A. KNOWLES

Confidential Assistant to the Secretary
Office of the Secretary

Under extremely difficult circumstances, Mr. Knowles demonstrated exceptional leadership, initiative, and creative ability in assuming direction of the Department's editorial research and speechwriting unit and molding it into a vital instrument for the articulation and the advancement of departmental objectives. Mr. Knowles had to shoulder the demand and responsibilities of this office at a crucial time in the Department's affairs. He assumed the major burden of preparing more than 100 speeches and many hundreds of statements during the Secretary's first year in the Cabinet. His work was complicated by a set of delicate and complex policy problems evolving from the economic situation and various Administration positions and actions that required sensitive and incisive interpretation. His dedication and high competence during this trying period were in the best tradition of unselfish public service.

BURT W. ROPER

Assistant General Counsel
for Legislation
Office of the Secretary

Mr. Roper has provided unusual leadership, ability, knowledge and imagination in creating a focal point for the varied legislative activities of the Department of Commerce for more than four years.

His ability to penetrate and understand, quickly and correctly, complex legislative proposals and to provide guidance to the operating bureaus and agencies which have vital interests in such proposals has made him a key figure in the Department's meeting its legislative responsibilities.

The success of the Department's legislative program in recent years has been in large part due to the qualities which Mr. Roper has brought to the position of Assistant General Counsel for legislation.

Mr. Roper's present assignment follows other legal positions he has held in the Department during a career of more than 23 years as a Department of Commerce lawyer who has consistently rendered outstanding services to his clients.

CHARLES W. BECKETT

Supervisory Chemist
Heat Division
National Bureau of Standards

For over 15 years, Dr. Beckett's administration of the Bureau's thermodynamics program has provided a host of NBS scientists with exceptionally challenging problems, the solutions of which have contributed to their own development, to the knowledge of the properties of materials, and to National defense, space, and industrial programs. His exceptional foresight in initiating, industry in implementing, and leadership and skill in administering research programs on thermodynamic and related properties of materials, have thereby contributed significantly to the fund of standard reference data, on fluorine compounds, and light element compounds. He is also cited for his pioneer work in difficult and important high temperature measurements of very fast phenomena. He has been sought out for service on numerous national and international advisory committees and panels.

JOHN L. HAGUE

Inorganic Standards Coordinator
Institute for Materials Research
National Bureau of Standards

John Hague has been associated with the NBS Standard Reference Materials Program for over half of its 60 years of existence. His experience in this area as a bench chemist, section chief, administrator of analytical standards, and Inorganic Standards Coordinator has proven to be exceptionally valuable to the Bureau and to U.S. industry. His influence in the chemical analysis of standard reference materials has reached into laboratories throughout the country through his coordination of cooperative analytical efforts. His broad perspective and thorough understanding of the problems of obtaining, preparing, certifying, and distributing all types of standard reference materials have helped immeasurably in disseminating the measuring capabilities of NBS throughout the world. Mr. Hague's outstanding and dedicated service in this area of standard reference materials has brought national and international recognition to the National Bureau of Standards and to the Department of Commerce.

SARAH ANN JONES

Chief Librarian
National Bureau of Standards

During the 46 years of Miss Jones' association with NBS library, it has grown from a small collection on weights and measures to a library of the first rank in the physical sciences and engineering, now containing 125,000 volumes. Her role as Chief Librarian since 1938 has guided this development and growth.

Her philosophy of service and her personal dedication are shown by the increase in staff utilization of the Library, an increase more rapid than the staff itself. In addition to this significant service, the Library, under her leadership, has been of great benefit to newly-created Federal technical agencies such as NASA, to many other Federal and state agencies, and of demonstrated value to the educational and industrial communities. Thirty-seven percent of interlibrary loans were made to American business concerns. Her leadership has made the NBS library into a valuable and eminent physical science library resource.

ELIO PASSAGLIA

Chief, Polymer Physics Section
National Bureau of Standards

Dr. Passaglia has made distinguished contributions to polymer research, and has shown outstanding leadership of groups conducting fundamental and applied research programs in the field of polymer physics. He instituted several new research programs, including one on the relationship between mechanical properties and the morphology of polymers, and another on the nature of the adsorption of polymer molecules on metal surfaces. Each program assisted in putting experimental measurements on a sounder basis, and in creating basic understanding of the phenomena involved. In the applied area, his work on fading tests has led to a new outlook on an old and difficult problem. In all cases, he has given the research carried out under this administration a personal touch that has markedly increased its impact, and accelerated its completion. Dr. Passaglia is active in scientific societies and is presently Chairman of the Division of High Polymer Physics of the American Physical Society.

MELVIN ROMANOFF

Chemist
National Bureau of Standards

The underground corrosion studies carried out by Melvin Romanoff at NBS are considered by corrosion workers throughout the world to be unique and invaluable. Whole sections of NBS Circular 579 describing this work have been translated into many languages. It is recognized as the authoritative publication on the subject and has been one of the "best sellers" among NBS publications. This work has been characterized as "the most renowned, most extensive, thorough, and complete to be found any place in the world in the field of underground corrosion." Another of his more recent publications has had an equally great impact on the engineering community. This is NBS Monograph 63 "Corrosion of Steel Pilings in Soils." It is the only work of its kind and has been of such great value and interest that over 30,000 copies have been sold. Its conclusions which show that piling does not corrode appreciably in undisturbed soil are of immense value to the building industry because they show that expensive corrosion mitigation devices need not be used. Mr. Romanoff's unusual administrative ability has made it possible to carry out this work, which ranges over the entire continent, at markedly reduced costs to the government.

JOHN K. TAYLOR

Chief, Microchemical Analysis Section
Institute for Materials Research
National Bureau of Standards

Dr. Taylor is being recognized for his exceptional contributions to the materials characterization problems of the NBS Technical Divisions through his highly capable organization six years ago of the NBS Service Analysis Program and through his continued and inspired guidance of this essential program, which in FY66 served 57 different NBS sections and 12 other government agencies. His broad analytical perspective gives him an unusual capability and capacity to handle practical analytical problems arising at all levels of complexity at NBS. He also has shown outstanding leadership in the area of high accuracy analysis in which he and his coworkers have developed the analytical capability of coulometry to the highest accuracy of any chemical method, i.e., 1 part in 100,000. Dr. Taylor's decades of service exemplify the highest traditions of NBS through his unselfish immersion in the critical materials characterization problems of others, while at the same time earning international recognition for his own program of highly accurate measurement.

ROBERT S. WALLEIGH

Administrative Officer
National Bureau of Standards

Mr. Walleigh is being recognized for his exceptionally skillful direction over the past eight years of the Bureau's relocation to its new laboratories in Gaithersburg. His dedication, intelligence and ingenuity have been a major resource in planning and carrying out the move. In addition to his intensive effort in directing this project, he continued to carry out his duties as chief administrative officer of NBS.

In the course of the Gaithersburg development, Mr. Walleigh showed great finesse in mediating the interests of the various parties involved in the total project—GSA, the Bureau and its staff, the many State, County and local officials. His smooth handling of the complex negotiations in the course of the development was a major contribution worthy of special recognition.

His enthusiasm, judgment, long range vision and wholehearted interest, plus the extra effort he has directed to this work, have resulted in an outstanding contribution by equipping the Bureau with laboratory facilities second to none which will meet the needs of science and industry for many years to come.

Silver Medal Award Winners

AARON S. SABGHIR

Chief Economist
Building Materials and
Construction Industries Division
Business and Defense Services
Administration

Mr. Sabghir is recognized as a leading authority in the field of construction economics. He has played a major role in fostering the development of construction fact-finding within the Department of Commerce. His outstanding professional competence has enabled him to fulfill a variety of special assignments such as spearheading BDSA efforts leading to the passage of the 1962 Trade Expansion Act legislation and acting as Chairman of the BDSA Outlook Planning Committee. He also developed a program document which was a major contribution to the formulation of BDSA's Seven Point Program. His association with Construction Review as Editor and writer since 1955 has given this publication distinction among Government publications.

ARTHUR C. TENDLER

Confidential Assistant
to the Administrator
Business and Defense Services
Administration

Mr. Arthur Tendler, regarded as one of the best informed people in Government on cotton textiles, has made outstanding contributions of unusual value to the Department by his leading role in implementation of a program of assistance to the United States textile industry. He authored the guidelines which were accepted by the Interagency Textile Advisory Committee and the President's Cabinet Committee on Textiles. He has been responsible for most of the complex and technical position papers for top level meetings, at which meetings he contributes as a technical expert. He has been instrumental in the successful negotiation of the eighteen bilateral cotton textile agreements that are in effect under the Geneva Long-Term Cotton Textile Arrangement.

MAURICE LIEBENBERG

Supervisory Economist,
Business Structure Division
Office of Business Economics

In recent years economists have made increased use of a relatively new tool for analyzing the behavior of the overall economy—the econometric model. It attempts to depict in a set of equations the essential quantitative relationships that determine the behavior of output, income, employment prices, and other factors affecting the business cycle. OBE's initial effort in this field was headed by Mr. Liebenberg, a member of its professional staff since World War II. The first results of his work, published in the *Survey of Current Business* last May, are recognized as an impressive contribution to business analysis, enhancing the reputation of the Department in research.

ELEANOR H. RICHARDS

Secretary to the Director
Office of Business Economics

Mrs. Richards has functioned in administratively responsible secretarial capacities throughout the life of the Office. Recognition of her skills is reflected in successive advancements, from serving Division chiefs, and an Assistant Director, to her present post with the Director. The accuracy of her work is impeccable, the speed with which she takes and transcribes dictation of a technical nature is exceptional, and the finished product is flawless. She has long been a member of the National Secretaries Association, exemplifying its highest standards. The Silver Medal testifies to other invaluable qualities as well—perception, willingness, tirelessness, resourcefulness and initiative applied to all aspects of the Office of the Director.

GENEVIEVE B. WIMSATT

Chief, Business Investment Section
Business Structure Division
Office of Business Economics

A professional economist with OBE since its designation as a separate unit of the Department, Miss Wimsatt in 1961 became a section chief responsible for one of the most highly regarded and widely used business indicators—plant and equipment expenditures. Miss Wimsatt had previously been instrumental in the creation of this pioneering effort in anticipatory statistics, the development of which made it possible to gauge the magnitude of business capital outlays as much as a year in advance. Since then she has established additional series on inventory and sales expectations. Her most recent significant accomplishment is expansion of the scope and utility of her output by effecting economies through use of the computer.

MORTON BOISEN

Assistant Division Chief
Statistical Methods Division
Bureau of the Census

Mr. Boisen has demonstrated exceptional leadership and technical proficiency in the design of systems to improve the efficiency of the Bureau's operations related to population and housing censuses and surveys. He has devised methods of maximizing the capabilities of computers in sample selection processes, previously not considered compatible with computerization. He has shown marked ingenuity in reorganizing work assignments and rescheduling activities to provide a more timely and orderly flow of materials without the deterioration of quality. This reorganization also served to transfer routine functions from mathematical statisticians to survey statisticians and other personnel, thus reducing pressure on one of the most serious recruitment problems for the Bureau.

TOBIA BRESSLER

Supervisory Statistician (Demography)
Bureau of the Census

Miss Bressler has displayed over several years an unusual degree of skill in guiding the publication of a rapidly expanding volume of new source materials in the very sensitive area of race and ethnic origin and in interpreting significant changes in population characteristics of minority groups in America, including the gains and losses of Negroes as compared with white persons in marital stability, family size, education, employment, and income. The statistics developed under her effective supervision have served as an indispensible part of the evidence used in making a rational evaluation of government programs relating to poverty, urban renewal, and civil rights.

HOWARD R. FLETCHER

Computer Programmer, Systems Division
Bureau of the Census

Over a period of several years, Mr. Fletcher has made many outstanding contributions in the development and expansion of programming technology in the Bureau of the Census. He has been responsible for significant advances in the design, development and modification of computer languages that have not only greatly facilitated the training of computer programmers but also have resulted in major gains in programming productivity. His work involving the design of programs interchangeable with second and third generation computers has been a notable contribution to the efficiency of the Census Bureau data processing system during the transitional periods.

ELIZABETH A. LARMON

Statistician (Demography)
Bureau of the Census

Since first joining the staff of the Bureau of the Census in 1945, Mrs. Larmon has made excellent contributions at progressively higher levels of responsibility, particularly to the publications program. These contributions were climaxed by her authorship of *Americans at Mid-Decade,* a report blending current statistics with graphic and pictorial presentation. This attractive and informative report has had a press run of 60,000 copies and has been widely utilized by newspapers and magazines. She also prepared the text of the United States Summary of Volume I, *Characteristics of the Population, 1960,* the most important report of the 1960 Census.

MILTON D. LIEBERMAN

Principal Statistical Adviser
to Government of Turkey
Ankara, Turkey
Bureau of the Census

Mr. Lieberman was most successful in providing consultative services and technical assistance in greatly improving the planning, execution, and quality of the Turkish censuses, surveys, and statistical compilations; in expanding the current statistical series; and in initiating experimental statistical programs in selected fields. He advised the Turkish Government in the preparation of legislation assigning direct and coordinative responsibility for the implementation of a modern statistical system; collaborated in the development of management decisions resulting in the reorganization of the State Institute of Statistics and in the establishment of a National Statistical Training Facility.

WILLIAM E. MORAN

Supervisory Employee Development
Officer
Bureau of the Census

Mr. Moran has made numerous contributions to the administration of employee recognition programs, employee development activities and management-employee information services. As Bureau Incentive Awards Officer he has been primarily responsible for the development of one of the most effective and just employee recognition programs in the Department of Commerce. In addition, under his guidance and direction the Bureau's participation in interagency and non-government education programs has grown from 83 employees in fiscal year 1961 to well over 500 employees in fiscal year 1966. His supervision of the publication of the Census Bulletin, the Bureau's principal management-employee communication medium, has brought the Bulletin to a place of wide recognition as a well-written, accurate, timely and attractive bi-weekly official paper.

RALPH E. MULLENDORE

Electronic Engineer
Bureau of the Census

Mr. Mullendore has made many outstanding achievements in equipment research leading to significant improvements and cost reductions in the data processing systems of the Bureau of the Census. His technical contributions have included: (1) The development of a number of applications for a digital plotter attachment to an IBM 1401 Computer especially in the field of graphic displays. (2) Assisted in the development of a tape to microfilm printer. This device was used for the 1964 Census of Agriculture and resulted in a savings of $50,000 in the printing of diary display tables. (3) Another important activity has been his close association with the development of the Linatron high speed photo-composer for the Government Printing Office which also has application to Bureau of Census data publication.

EDWARD A. ROBINSON

Statistician (Economics)
Bureau of the Census

Dr. Robinson's imaginative leadership and outstanding professional competence have resulted in significantly improving the Census Bureau's statistics on concentration of industry and the merger movement. He has added measurably to the Bureau's stature in this important field of inquiry while retaining its integrity and strengthening its relations with the legislative and executive branches of Government. In achieving this objective, Dr. Robinson devised analytical approaches that represented real innovations to solving the problem being studied.

JAMES WILLIAM SHORES

Chief, Computer Operations Branch
Bureau of the Census

Mr. Shores has consistently demonstrated outstanding administrative and supervisory ability and a remarkable competence in managing the computer operations of the Bureau of the Census. Because of exceptional leadership ability and technical proficiency, he has gained wide recognition as one of the most knowledgeable specialists on computer and peripheral equipment usage in the field of electronic data processing. Through his skilled management of available manpower resources, Mr. Shores has been responsible for the Bureau's successful utilization of all potential computer time available both in its central location and at its field installations.

DAVID P. BEATTY

Technical Assistant to the Chief,
Aeronautical Chart Division
Environmental Science Services
Administration

Mr. Beatty made major contributions to national and international aeronautical charting programs by his timely action in the preparation of prototype charts and administering charting assignments imposed by the Inter-Agency Air Cartographic Committee (IACC). He served on two task groups of IACC to develop aeronautical charts for joint civil/military use. Mr. Beatty is alternate member on the Federal Aviation Agency Flight Information Advisory Committe. He reviews all actions presented by the Inter-Agency Group on International Aviation and was a member of the U.S. Delegation to the International Civil Aviation Organization (ICAO) Meeting in Montreal, Canada, where he was alternate Map Spokesman for the United States.

HAROLD A. BEDIENT

Acting Chief, Data Automation Division
National Meteorological Center
Environmental Science Services
Administration

In developing a tropical weather analysis program, Mr. Bedient made an essential break-through through the development of an ingenious method for minimizing non-meteorological noise in the final product. As Chief of the new Data Automation Division of the National Meteorological Center, he has given outstanding impetus to existing programs and began important new ones. Automation of communications and improvements in automatic data display accomplished under his leadership place the Center in a leading position in the field of automatic data handling.

LLOYD E. BROTZMAN

Regional Administrator,
Weather Bureau
Jamaica, New York
Environmental Science Services
Administration

This citation is awarded in recognition of the outstanding major contributions made by Mr. Lloyd E. Brotzman to the field of administration which have had a considerable effect and impact on the over-all efficiency of the Weather Bureau. His inherent knowledge and application of meaningful management principles have, in no small measure, enhanced the operation of the Regional Headquarters during the trying days of reorganization. He attacked the task of reorganizing the Eastern Region with enthusiasm and vigor. His accomplishments extended from the planning and programming stage of a function to the final evaluation and operational aspects.

RICHARD A. GARRETT

Meteorologist in Charge
Topeka, Kansas
Environmental Science Services
Administration

Mr. Garrett is cited for his unusual awareness of and sensitivity to the public needs in the severe weather warning realm as well as his imaginative leadership and response to these which led to his developing, implementing, and maintaining such an effective tornado warning system that resulted in the saving of many lives when an extremely destructive tornado struck Topeka, Kansas last June 8 causing over $100,000,000 of property damage.

ROBERT D. GOODRICH

Technical Assistant, Distribution Division
Coast and Geodetic Survey
Environmental Science Services Administration

Mr. Goodrich has a long background over a period of 30 years in superior cartographic and related functions in the Coast and Geodetic Survey. He has made significant contributions to the Chart and Distribution activity of the Cartographic Program of the Bureau. His unusual background in cartography and reproduction methods and techniques have been applied effectively in his high level performance of duties as Technical Assistant in the Distribution Division. He has kept the division abreast of technological innovations, thereby materially increasing output through better efficiency and employee morale.

CHRISTOS HARMANTAS

Chief, Upper Air Equipment Section
Equipment Development Laboratory
Environmental Science Services Administration

Mr. Harmantas is recognized nationally and internationally as the American expert on radiosonde equipment and contributed to the development of the present WB radiosonde. His efforts in the radiosonde program have resulted in providing the American Weather Service with the most cost effective equipment available in the world. Many foreign countries recognize this and are using the American sonde.

He is continuously called upon as a leader and consultant at national and international gatherings concerned with radiosonde problems. His multilingual ability has enabled him to build strong international ties.

RAYMOND L. JOINER

Digital Computer Systems Administrator
National Weather Records Center
Asheville, North Carolina
Environmental Science Services Administration

As a Government and industry-wide recognized expert, Mr. Raymond L. Joiner has continually evaluated and developed plans and programs directed toward more efficient utilization of all automatic data processing equipment at the National Weather Records Center. Under his technical guidance the Center has progressed during the past decade from a simple FAM system to an efficient, digital computer complex.

DONALD L. JORGENSEN

Chief, Test and Evaluation Section
Environmental Science Services
Administration

Mr. Jorgensen has developed a very valuable computer technique for deriving the synoptic climatology of precipitation as a function of significant circulation features on a moving grid of points. He has applied this technique to both sea level cyclones in the East and higher level cyclones in the West, and it has been used by others for snow forecasts in the Mid-West, forecasts on the West Coast, and forecasting storms on the East Coast. It forms the basis for a 5-yr. program which has been enthusiastically received in the W. B. Western Region, where it will be applied on an operational basis this winter as an objective forecasting aid. Earlier he developed objective methods of forecasting rain in Calif. and edited an excellent series of W. B. Forecasting Guides.

DEE E. KIMBELL

Chief, Support and Maintenance Branch
Office of Geodesy and Photogrammetry
Environmental Science Services
Administration

This award is for significant contributions of an original and pioneering nature in the Bureau's Satellite Triangulation Program. This entirely new concept of worldwide geodesy required innovation and original development in a new and vastly enlarged geodetic operation. New techniques, procedures, and equipment adaptation and use, presented challenges which Lt. Kimbell met with dispatch and vision.

ARTHUR R. KNEER

Chief, Programming Branch
National Meteorological Center
Environmental Science Services
Administration

Mr. Kneer has made many key contributions to numerical weather analysis and prediction during the past decade in which it has developed rapidly. He developed the first successful automated technique for plotting weather data on charts. The principles he developed are used as the basis for current development in this area. His work in programming has been instrumental in the most rapid utilization possible by NMC of computers at the forefront of the state-of-the-art in computer design. His high technical competence and his determination set an example for all during trying times with new and unproven equipment.

WILBERT R. KRUMM

Western Fire-Weather Coordinator
Salt Lake City, Utah
Environmental Science Services
Administration

Mr. Krumm is cited for outstanding and dynamic leadership in the development and promotion of the fire-weather service in the West; for development of new procedures and programs including mobile fire-weather camper units, fire-weather research and training, and annual fire-weather conferences; for his stimulation of interest, cooperation and support of national, state and county fire-control agencies; and for his contributions to the formulation of a National Fire-Weather Plan.

It is clear that Mr. Krumm, through his dynamic leadership, scientific competence and devotion to duty, has made an outstanding contribution to the technical services of the Bureau and to his government and country as a whole.

CLARENCE E. LAMOUREUX

Meteorologist in Charge
Des Moines, Iowa
Environmental Sciences Services
Administration

Mr. Lamdureux is awarded for exemplary performance in warning the public of natural disasters in Iowa especially the extreme snow melt flooding in the spring of 1965 and the extremely effective handling of weather forecasting and warning responsibilities in connection with a blizzard in March 1966, which resulted in saving of lives, livestock, and property.

JOANNE SIMPSON

Chief, Experimental Meteorology Branch
Atmospheric Physics & Chemistry Laboratory
Environmental Science Services Administration

Dr. Joanne Simpson concieved, designed, executed, and evaluated a scientific experiment which demonstrated that the life history of convective clouds can be fundamentally modified by massive silver iodide seeding in the supercooled cloud tops. This experiment involved the coordination of six aircraft from various Government agencies. A key factor in its success was Dr. Simpson's personal participation in all phases of the work. It is very difficult to conduct a valid experiment in this complex field with due regard to classical as well as modern (statistical) principles of experimental design. Dr. Simpson's pioneering work will form the basis for future artificial modification of convective clouds and storms.

CURTIS J. SMITH

Field Aide, State Climatologist Office
Lincoln, Nebraska
Environmental Science Services
Administration

Mr. Smith is being cited for his imaginative and venturesome contribution of inestimable value to the people of east-central Nebraska and to the river and flood warning services of the Department in the ESSA, Weather Bureau, in connection with the extensive flooding in the Loup River Basin in August 1966. Through the operation of his "ham" radio set, he learned of the serious threat of flooding while off duty and, acting on his own, he proceeded to the threatened area where he utilized his "ham" set to transmit official and unofficial reports of rainfall and official stages of the Loup River for two days when regular channels of communication were inoperative. The transmission of these reports contributed greatly to the accuracy of flood forecasts which, in turn, permitted those in the affected area to prepare for and flee from the rising waters.

MICHAEL SUNRAY

Physical Science Technician
Mexico City, Mexico
Environmental Science Services
Administration

With an exceptional combination of technical competence and diplomacy Mr. Sunray has, through his own initiative and excellent relationships with officials of the Mexican Meteorological Service effected material improvement in the Mexico-United States programs in the field of meteorology. As the result of his resourcefulness, judgment, and technical skill the value of upper-air weather measurements has steadily improved during the four years he has represented us. He is held in high esteem equally by Mexican officials and by field personnel. He represents with distinction the Department of Commerce as well as the American Embassy on matters related to meteorology in Mexico.

LORNE G. TAYLOR

Chief, Marine Chart Division
Environmental Science Services
Administration

Captain Taylor has pioneered many bold concepts in marine charting and related C&GS activities, including efficient management practices to implement the Hydrography Program. He has innovated nautical charting and bathymetric mapping programs for marine commerce and the development of economic potentialities of the environmental resources of our Nation's Continental Shelf. Captain Taylor's long and varied experience and his engineering and administrative ability have resulted in the advancement of cartographic engineering techniques and practices, including automated cartographic systems, to meet the demands of modern technological advancements in marine navigation and oceanographic research.

LLOYD W. TOURVILLE

Supervisory General Physical Scientist
National Environmental Satellite Center
Environmental Science Services Administration

Mr. Tourville contributed directly to the successful analytical research and experimentation performed in the early days of the TIROS Program to determine how best to use weather satellite data operationally. He trained others to utilize the operational techniques thus developed. He is manager of the ESSA satellite readout station at Gilmore Creek, Alaska, and in this capacity has demonstrated unusual professional versatility in meeting the operational problems arising from his station's Arctic and isolated location.

HAROLD Q. VAN DYKE

Station Manager, ESSA Command and Data Acquisition Station
National Environmental Satellite Center
Environmental Science Services Administration

Mr. Van Dyke is cited for distinguished performance in the planning, staffing, and operation of the ESSA Command and Data Acquisition Station at Wallops, Virginia. Mr. Van Dyke coordinated on the station construction, planned the work alignment, and recruited and trained the personnel so effectively that practice operations were started immediately upon the station's completion. He has demonstrated exceptional skill and devotion in successfully operating the first command and data acquisition station staffed by Civil Servants. He has shown an unusual interdisciplinary capability, involving technology, meteorology, and administration.

COMMUNICATIONS SYSTEMS DESIGN GROUP

Institute for Telecommunication Sciences and Aeronomy,
Tropospheric Telecommunications Laboratory
Boulder, Colorado
Environmental Science Services Administration

Mr. Philip L. Rice, Mrs. Anita G. Longley, Mr. Kenneth A. Norton and Mr. Albrecht P. Barsis have distinguished themselves by their very valuable contribution to the technology of radio communications and for meritorious authorship of NBS Technical Note 101 on "Transmission Loss Predictions for Tropospheric Communication Circuits." Their studies and the published results represent the most comprehensive analyses that exist today on this subject.

This important work has no competitor; it meets a most urgent need in the field of communication systems design. Its wide acceptance both nationally and internationally is a tribute to the authors' very valuable achievements.

SPACEFLIGHT METEOROLOGY GROUP

Weather Bureau
Environmental Science Services Administration

Richard A. Brintzenhofe, Jesse R. Gulick and Ernest A. Amman are cited for the development of techniques and procedures for the provision of current weather services, and forecasts on a critical time basis for extended periods for the tropics and mid-latitudes world-wide, to NASA's control centers in support of the Mercury, Gemini, and Apollo programs. Each has primary responsibilities as Section Head in the Spaceflight Meteorology Group and has made significant contributions to one or more specific aspects of weather support to successful manned space flights. The success of these flights involved not only the image of the United States world-wide but safety of life as well.

ARTHUR C. RUTZEN

Director, New York Field Office
Office of Field Services

Mr. Rutzen is awarded for exceptional leadership in carrying out the Department of Commerce programs of assistance to business. His efforts have brought about major improvements in the relationships of the New York Field Office with the business community as well as with State and local officials and educational institutions throughout the New York Metropolitan area and in the States of New York and New Jersey. These improvements have resulted in much higher quantity and quality of service without corresponding increases in personnel.

CHARLES F. BOEHM

Director, Commercial Intelligence Division
Bureau of International Commerce

Mr. Charles F. Boehm is a dedicated federal executive with long experience in the Department, proven managerial abilities, unusual acumen, and outstanding professional competance.

His creative planning and adaptation of ADP techniques to the operations of his Division has made important and highly effective contributions to the Departmental services rendered to the American business community in promoting the international trade of the United States.

ALLEN H. GARLAND

Director, Trade and Commercial
Policy Division
Bureau of International Commerce

Mr. Allen Garland over a long period of time has made contributions of unusual value in the field of trade policy formulation, negotiations and implementation. His participation in all multilateral tariff negotiations under the trade agreements program over the last sixteen years has been highly successful and has received repeated commendation. He organized the Department's staff of commercial policy specialists and managed them in a highly productive way. He firmly, but fairly, represented the Department in the Government's councils in presenting a balanced point of view reflecting U.S. business interest. He has directed the Department's staff work in the Kennedy Round of tariff negotiations, drafting trade negotiation principles, and securing their acceptance with the U.S. Government and in the GATT Kennedy Round negotiations.

EDWARD J. KRAUSE

Assistant Director
Office of International Trade Promotion
Bureau of International Commerce

Mr. Edward J. Krause has made major contributions to the Department of Commerce in the initiation, development, and operation of new international trade promotion programs. Under his creative leadership, the Department's overseas permanent Trade Centers and commercial fair participations have earned world-wide recognition for their effectiveness in expanding the exports of U.S. manufacturers.

MURIEL W. COE

Foreign Shipping Industry Analyst
Maritime Administration

Miss Coe has gained national and international recognition for her work in the field of foreign shipping problems and the studies of which she is author or co-author. Through her research and study in this field she has contributed valuable advice and information to the Maritime Administrator and other officials of the Maritime Administration, as well as other Government departments, international organizations, and private shipping companies. During her 25 years with the Maritime Administration and its predecessor agencies her work has been of superior caliber and she has received numerous commendations for her contributions to the work of the Maritime Administration.

MYRON C. DOTY

Chief, Ship Sales and Disposal Branch
Maritime Administration

With responsibility for the planning, development and carrying forward of the Maritime Administration's Ship Disposal Program, as Chief of the Ship Sales and Disposal Branch, Mr. Doty has accomplished a very sizeable disposal program of unrequired governmental ships in a most efficient and profitable manner. His knowledge and familiarity with the statutory requirements and business dealings of the Ship Disposal Program have made it possible for him to carry forward this program in a manner that has won the praise and compliments of both governmental and industry officials. His ingenious planning and valuable knowledge in directing this work have contributed to an outstanding vessel disposal program.

MARION E. PARR

Supervisory Ocean Transportation Specialist
Maritime Administration

Mr. Parr has accomplished numerous highly technical assignments in an outstanding manner that has contributed significantly to the economic growth and development of the American Merchant Marine. His organizational ability and conscientious efforts together with his broad maritime experience have made possible the outstanding service rendered in the U.S. Government's interest as well as in furthering the best interests of the U.S. Merchant Marine. His exceptionally detailed knowledge of Maritime operations in general, and his numerous suggestions and recommendations have contributed to many worthwhile improvements in the operating efficiency of the Maritime Administration and private shipping organizations.

GEORGE W. BOYS

Chairman, Board of Patent Interferences
Patent Office

Mr. Boys is being recognized for taking a leading part in the first major revision in 30 years of Patent Office rules governing interferences. Mr. Boys bore the responsibility for wording the amended rules and was primarily responsible for the installation of practice provided by the new rules. This activity required many astute decisions and the solution of numerous problems. As a result, pending interferences have been substantially reduced.

GLENN E. BROKKE

Supervisory Highway Research Engineer
Bureau of Public Roads

Mr. Brokke's broad knowledge and wide experience have earned him Nationwide recognition as an authority on urban transportation planning techniques. His extraordinary familiarity with all facets of the sophisticated procedures has produced guides and manuals used throughout the Nation and in several foreign countries. He has provided outstanding leadership to top planning officials of States and cities in conceiving, planning, and evaluating basic and applied research in the urban transportation planning field. Mr. Brokke was one of the first engineers to recognize the great advances that were potentially possible by utilizing high speed computers in urban transportation planning studies. His technical competence in developing such programs and procedures has resulted in substantial savings as well as more significant studies.

TITUS J. DEBELY

Highway Engineering Technician
San Francisco, California
Bureau of Public Roads

Mr. Debely has acquired unusually comprehensive knowledge of all phases of highway engineering and their broad relationship to the interpretation of policy regulations and engineering specifications. His practical application, as a result of his extensive knowledge and background with engineering matters, has resulted in outstanding contributions to the technical excellence and accuracy of the engineering applications in an extensive field of highway construction. His excellent perspicacity has enabled him to correlate the construction activities through the review of its engineering reports and application of both its technical and fiscal requirements.

EDWARD J. MARTIN, JR.

Personnel Officer
Bureau of Public Roads

For over 30 years Mr. Martin has most ably served Public Roads in the areas of organization, management, budget, personnel, and general administration. In 1954 he was awarded the Department's Silver Medal Award for exceptionally competent performance of his official duties as Administrative Officer for Region 9. In 1958 he was named Chief of the Personnel and Training Division. His managerial proficiency, good judgment, exceptionally diversified experience, and keen insight into Public Roads worldwide organization and its administration stamp him as a recognized authority in the field of personnel management. Mr. Martin is the first and only Public Roads employee to be honored by receiving a second Silver Medal Award. This is indeed evidence of the high esteem and tremendous respect with which he is regarded by top management.

ROBERT E. SIMPSON

Division Engineer
Ames, Iowa
Bureau of Public Roads

Mr. Simpson's entire career has been dedicated to the service of the Federal Government. He made valuable contributions to the Federal-aid and direct construction programs during his tenure of service in Utah from 1939 to 1963. In 1963 he was named Division Engineer for Iowa where he has had a tremendous influence on the progress made by the Iowa State Highway Commission in the broad facets of modern highway administration, design, and construction practices. Under his leadership and guidance, Iowa has gained national recognition for its fine progress in implementing the Highway Beautification Program. Mr. Simpson has indeed made a great and lasting contribution to the highway program in the State of Iowa.

GORDON A. CHRISTENSON

Assistant General Counsel
for Science & Technology
Office of the Secretary

Mr. Christenson has demonstrated unusual skill and ability in solving legal problems created by the increasing scientific and technological responsibilities of the Department. As the first Assistant General Counsel for Science and Technology, he has built an excellent legal staff and has helped immeasurably to bring together the twin disciplines of law and science. Mr. Christenson was the legal architect for the Presidential reorganization plan which created the Environmental Science Services Administration and was the chief draftsman of the State Technical Services Act of 1965, a law designed to put to use through State programs existing scientific knowledge for the purpose of economic growth. He has distinguished himself and the Department with his achievements as a Government lawyer.

DANIEL F. O'KEEFE, JR.

Assistant General Counsel
for Transportation
Office of the Secretary

Mr. O'Keefe has demonstrated extraordinary ability in providing a major portion of the legal services required of the Department in support of the legislation establishing a Department of Transportation. He also distinguished himself in the role he played in connection with the National Traffic and Motor Vehicles Safety Act of 1966 and the Highway Safety Act of 1966, laws which will have a major impact on all Americans. In addition, he has exhibited rare judgment and knowledge on a variety of legal problems involving transportation and he has exemplified overall legal excellence.

GEORGE T. ARMSTRONG

Supervisory Chemist Heat Division
National Bureau of Standards

Dr. Armstrong has directed the Reaction Calorimetry group in the Heat Measurements Section since 1958. He has received national and international recognition for his leadership in the study of fluorine compounds and use of fluorine compounds in reaction calorimetry to investigate the thermodynamic properties of matter. He has also applied fluorine to gaseous materials in a flame type of calorimeter. He has had responsibility for developing and certifying standards of heat of combustion. He has been a leader in the Calorimetry Conference, serving as principal officer for many years, and has rendered distinguished service to other professional groups, often contributing to the professional literature as an expert in calorimetry.

GEORGE E. AUMAN

Administrative Officer
National Bureau of Standards

Mr. Auman is being recognized for his exceptionally able work as Executive Secretary in planning and guiding the staff activities of the Standing Committee of the Federal Council for Science and Technology. The Director of the Bureau has been Chairman of these Committees and Mr. Auman, in his capacity as Special Assistant to the Director, has been responsible for carrying out most of the functions of the committee work. His efforts have contributed to the development and issuance of a number of reports and symposia dealing with scientific and technical personnel in Federal Agencies.

PIERRE J. AUSLOOS

Chief, Radiation Chemistry Section
Physical Chemistry Division
National Bureau of Standards

Dr. Ausloos is cited for his outstanding leadership and accomplishments in radiation chemistry. He has been instrumental in establishing the Bureau as a world center for studies of the chemical effects of ionizing radiation. He has written 50 articles for technical journals and organized a highly successful Informal Conference on Photochemistry at the Bureau in 1959. He was invited to be resident consultant at the Institute de Chemie Physique, Sorbonne, France, in 1959 and has been invited to several Gordon Conferences. He chaired a symposium on ion-molecule reactions at the American Chemical Society Meeting in September 1966 and was invited to lecture at the joint U.S.-Japan Conference on Radiation Chemistry in Hawaii in 1966. He has played a major role in planning and executing the program in radiation chemistry at the Bureau.

PAUL G. CAMPBELL

Chemist
Institute for Applied Technology
National Bureau of Standards

In spite of the highly complex chemical structure of asphalt Dr. Campbell succeeded in developing a quantitative method that measures the relative durability of coating grade asphalts in less than 24 hours compared to the ASTM method that may require as much as 90 days or longer to complete. Furthermore the rapid results are extremely important when a manufacturer must suddenly change from one source of raw material to another because of shortages, economic conditions, etc. Dr. Campbell's work on asphalt oxidation is more extensive and fundamental than any reported in the scientific literature. His publications are referenced in the U.S. and abroad by scientists engaged in bituminous research.

HERBERT D. COOK

Electronic Engineer
Office of Associate Director
for Technical Support
National Bureau of Standards

Mr. Cook developed an automatic fringe counting interferometer for use in calibration of line scales. By eliminating the time-consuming, manual counting of previous methods, the Bureau is able to offer increased accuracy, reduced cost and expanded services on a wide range of laboratory and industrial scales.

RICHARD D. DESLATTES

Physicist
National Bureau of Standards

Starting by himself with no equipment in 1963 Dr. Deslattes has built an outstanding research group in soft X-ray spectroscopy and crystal topography. He has published with his colleagues a number of widely acclaimed papers in the areas of instrument design, topography of highly perfect crystals and the soft X-ray emission spectra of gas molecules. He has also shown great diligence in applying his results and making them available to and appreciated by others.

HYLTON GRAHAM

General Engineer
National Bureau of Standards

Mr. Graham is being recognized on the basis of his excellent record over a period of several years in the planning, construction and moving of the National Bureau of Standards from Washington to Gaithersburg. In this work he has been responsible for carrying out the policy decisions made by the Associate Director for Administration.

He has done an outstanding job in working with the many outside groups involved such as the architects, moving contractors, and staff of the Public Building Administration. At the same time, his services in meeting the unusual requirements of the Bureau's scientists have likewise been outstanding.

In these final stages of the relocation to Gaithersburg, it is appropriate to recognize Mr. Graham's extremely important role in this undertaking.

JAMES R. McNESBY

Supervisory Chemist Physical
Chemistry Division,
National Bureau of Standards

Dr. McNesby initiated a major program in vacuum ultraviolet photochemistry in 1959, resulting in a number of significant papers which have established the Bureau as the leading institution in photochemistry. The first of these papers on the vacuum ultraviolet photolysis of ethane, revealed the significant and heretofore unrecognized molecular detachment process in the reaction. Subsequent findings confirmed that the behavior was general for hydrocarbons. There followed several other papers of a pioneering nature. One of these of major significance for the Bureau of Standards programs in chemical kinetics established a basis for absolute rate constant measurements. This promises now to be a start in the direction of the determination of absolute rate constants for a wide variety of elementary type chemical reactions.

SAMUEL PENNER

Physicist, Radiation Physics Division
National Bureau of Standards

As Chief of the Accelerator Physics Section, Dr. Penner has made very valuable contributions to science and technology in the fields of magneto-optical design and planning of experimental facilities. With increasing use of particle accelerators in research and industrial applications his contributions will be widely utilized for measuring beam energy, handling beams, and applying beams to products by means of magnetic scanning systems. Techniques he developed are now in general use throughout the world, being the basis upon which most beam handling systems for modern accelerators are designed. He is nationally and internationally recognized in his field. When Dr. Penner designed the end station at Stanford, he was identified as one of five people in the world who have made significant contributions to the field of charged particle optics during the past 10 years.

KARL-BIRGER PERSSON

Chief, Radio Plasma Section
Radio Standards Laboratories
Boulder, Colorado
National Bureau of Standards

This award is made for Dr. Persson's contributions to the study of plasma mechanisms and the technology of plasma measurements, especially for the development and utilization of the brush cathode plasma. This type of plasma, having unprecedented stability and spatial uniformity, is uniquely suited for studies of plasma measurement technology. These contributions will assist the radio communication industry in many different ways and the development of devices for generating power by nuclear fusion.

WILLIAM J. SCHWERDTFEGER

Electrical Engineer
National Bureau of Standards

William J. Schwerdtfeger is an internationally recognized pioneer in the application of polarization techniques to the measurements of corrosion rates of metals and alloys in environments of technological importance. He has established the validity of polarization techniques for rapid determination of corrosion rates, enabling the engineer to determine, without the long wait required by other methods, the ability of a given metal to withstand a given environment. In addition, Mr. Schwerdtfeger is an acknowledged expert in the corrosion prevention technique of cathodic protection. This technique contributes substantially in cutting down on the costs due to corrosion to many industries. He has established the potential criterion for cathodic protection, which makes it possible to cut the cost of protection.

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